

REMARKS

Claims 1-21 remain pending in the present application. By the present amendment, claims 1, 3, 4, 5, 10, 11, 12, 15, 16, 17, 19, 20 and 21 have been amended. Reconsideration of the previous rejection of claims 1-21 is requested in view of the amendments to the claims and the remarks presented below.

In the Office Action of July 2, 2003, claims 1 - 21 were rejected under 35 USC §112, second paragraph, as being indefinite. The Examiner pointed to the use of "for example" in claims 1 and 10, the use of "or the like" in claims 4 and 16, the use of "different rows" in claims 5 and 17, the use of "point of balance" in claims 6 and 19, and the use of "roll of the tool" in claim 9. The objectionable phrases have been deleted from claims 1, 4, 10 and 16. An antecedent basis has now been provided for "different rows" in claims 5 and 17. As a consequence, it is believed that these claims are now definite. Others of the claims have been amended by deleting reference numerals. This brings the claims into conformity with U.S. practice and clarifies the claims, as well.

The phrase "point of balance" in claims 6 and 19 is clearly defined in the instant specification and, as a consequence, the use of this phrase in the claims is not indefinite. The Examiner's attention is directed to page 4, lines 24 - 26 where it is stated: "Each marker has a two-dimensional shape and its point of balance, i.e. the center-of-gravity of a disk having the same design and a uniform thickness, is detected and is used as its measuring point." As a consequence, the use of "point of balance" in the instant claims is clear and definite.

The "roll" of the tool is a commonly understood orientation reference, illustrated diagrammatically in Fig. 1 of the drawings, as being rotation of the tool about one of the three coordinate axes. As a consequence, the use of the word "roll" in the instant claims is clear, and definite.

The Examiner has further rejected all of the claims in the instant application as unpatentable under 35 USC §103(a) in view of Hashima et al, U.S. Pat. No. 5,617,335. With regard to claim 1, the '335 patent is said to disclose all that is claimed, with the exception that it does not disclose "the element that the element . . . to be obscured by some obscuring object as claimed." The Examiner argues that "one ordinary skilled in the art at the time of invention can see that the obscured or basically any mark could be simply be called as obscured mark. Therefore, at the time of invention one can take the Hashima's disclosure for reorganization of the 3D mark and could create the 3D image of any obscured mark for the purpose of 3D creation." Applicants disagree. The '335 patent does not deal with obscured reference marks or elements, and it clearly does not teach "calculation of at least one image point on the tool related to the measuring element even though a part of it happens to be obscured" as called for in claim 1 and the claims depending therefrom. There simply is no discussion or consideration in the '335 reference of the problem of having images obscured by dirt, nor of operation in less than a clean environment. As a consequence, there is no suggestion in the '335 patent of dealing with the difficulties such an adverse environment presents.

Similarly, the '335 patent clearly does not teach "each measuring element and/or marker to be used as position and/or orientation indicating means having a size making it restorable by the processing means even if a part of it on the tool is obscured for the image area means." There is no suggestion of the problem of dirt obscuring the measuring elements from view in the '335 patent, and there clearly can be no suggestion of an approach for dealing with this problem in the '335 patent.

It is submitted that claims 1 and 10 and the claims depending therefrom are patentable over the '335 patent for the reasons set out above with respect to claims 1 and 10. Further, the claims depending from claims 1 and 10 recite numerous limitations that further distinguish them from the teaching of the '335 patent. For example, the claims specify that the markers are arranged in one or a plurality of rows of markers and that

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lines going through the rows of the markers are determined. These rows may be parallel or they may be intersecting. None of this is suggested by the '335 patent.

CONCLUSION

Accordingly, applicants respectfully submit that, in view of the above amendments and remarks, the application is now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

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